

AMENDMENTS TO THE SPECIFICATION

Please replace paragraph [0063], which begins on page 14, with the following:

The second component of a sieve is a set of one or more storage locations to which operations indicated by the property apply. In one embodiment, a sieve is stored persistently as an extent list (a set of offset-length pairs) and can be expanded into a bitmap (with each bit representing a fixed-size volume region/block) when being loaded into memory. A bitmap with each bit representing a region can be manipulated and queried more quickly and easily, providing quick response to membership queries. The extent list can be thought of as a compression (length-encoded) of the bitmap. An extent list is more suitable for persistent storage, being more compact than a bitmap. Another alternative for extent map representation is an interval tree-based representation, also providing fast indexing but being more difficult to manipulate.

Please replace paragraph [0067], which begins on page 15, with the following:

Another way of representing the extra dimension(s) is to have a separate one-dimensional sieve for each entity in the dimension. In this form of representation, one extent map exists for each entity in each extra dimension. For the above example, for the extra dimension of VOL_SIEVE_PROPERTY_CLUSTER, node N1 has the sieve {[20,45], [1000,*]}, N2 has {[1000,*]} and N3 has {[1000,*]}. Although this representation is redundant and requires more storage space [[that]]than the above-described representation, this representation may be easier to interpret.

Please replace paragraph [0068], which begins on page 16, with the following:

In one embodiment, sieves are associated with a storage area (volume) thoughtthrough the storage area's record in a configuration database. Sieves are represented as a new type of configuration record so that transactional operations can be performed on a sieve. In one embodiment, sieves are loaded into the kernel memory of the computer system hosting the data management software and/or replication facility, since most sieve properties affect the I/O path

to the storage area (volume).